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| 09/927,427 | 08/08/2001 | Michael Howard | MS1-909US | 6390 |
| 22801 | 7590 | 04/10/2006 | EXAMINER | |
| LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201 | | | TESLOVICH, TAMARA | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,427

Applicant(s)

HOWARD ET AL.

Examiner

Tamara Teslovich

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on February 1st and 23rd, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim 32 is cancelled by Applicant.

Claims 1-31 and 33-36 are amended.

Claims 1-31 and 33-36 are herein considered.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 1, 2006 has been entered.

Response to Arguments

Applicant's arguments filed February 2, 2006 have been fully considered but they are not persuasive.

Applicant's arguments concerning the Examiner's rejections of claims 1-10 as being directed to non-statutory subject matter are considered but no persuasive. The result of claim 1 is an analysis, and until that analysis is user and made available it merely comprises a process within a processor without a tangible result. For these reasons, those 35 USC 101 rejections presented in the Examiner's previous office actions are maintained and repeated below.

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Applicant's arguments concerning claim 1 and Nerurkar's alleged failure to describe a computer-implemented method of any type are considered but not persuasive. The Applicant cites a number of comments made by the Examiner in the previous office action including information concerning the title of the article, where it was found and the job description of Nerurkar as an associate of the Software Concept Library in order to provide additional support for the claim that Nerurkar does in fact disclose software utilizing the Onion Peel Model as described. The Examiner would like to note that although this information was cited, it was not the only information cited in support of the Examiner's rejections. The Examiner also pointed to specific sections of the article wherein it is stated that 'the need to include security as one of the concerns in the functional analysis and design of the **software** itself' providing sufficient support that Nerurkar's model is to be designed into software. The Examiner would also like to point to additional sections within Nerurkar's article, those that concern product development (page 50 column 1) and the capabilities of the model including handling distributed applications and providing maintainability and scalability for systems (page 56 column 3). From this information, as well as the remaining sections of the article that although not specifically mentioned are included as part of the Examiner's prior art rejection, the Examiner contends that Nerurkar does in fact anticipate each and every element of claim 1, enabling the invention as recited in the claim.

Applicant's remaining arguments concerning claim 1 fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims

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patentably distinguishes them from the references. The Examiner has already pointed out those sections of Nerurkar which disclose the limitations of claim 1. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

In response to the Applicant's arguments concerning claims 2-10 and Nerurkar's failure to recite the additional features thereof, the Examiner respectfully disagrees.

The Applicant's arguments concerning claim 5 and Nerurkar's failure to teach wherein particular components are selected and displayed along with other similar potential security threats are respectfully disagreed with. The Applicant contends that the partitioning based upon the similarities and natures of the security concern are not equivalent to the partitioning done by the instant application because they are not done in response to something being selected. The Examiner disagrees as it seems logical that the diagram can only be created by the specific selection of each of the security concerns followed by a careful consideration of the remaining concerns so that they may be placed in categories appropriate in relation. Each component must be selected before being placed within the diagram.

The Applicant's arguments concerning claim 6 and Nerurkar's failure to teach wherein particular components are selected and displayed along with other similar potential security threats are respectfully disagreed with. The Applicant contends that the partitioning based upon the similarities and natures of the security concern are not

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equivalent to the partitioning done by the instant application because they are not done in response to something being selected. The Examiner disagrees as it seems logical that the diagram can only be created by the specific selection of each of the security concerns followed by a careful consideration of the remaining concerns so that they may be placed in categories appropriate in relation. Each component must be selected before being placed within the diagram.

The Applicant's arguments for claims 11, 21, and 31 refer back to those for claim 1, and are rejected for the same reasons as given above in regards to claim 1. Note: Although page 19 of the Applicant's remarks refers to Claim 31, the Examiner believes that the Applicant erred and rather meant to discuss claim 21 considering the sequential nature of the remaining claims and the fact that claim 31 is discussed in subsequent pages.

The Applicant's arguments for claims 12-20, 22-30, and 32-36 rely upon the withdrawal of the rejection of claims 11, 21 and 31 which have been declined, and so remain rejected for the same reasons.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claim raises a question as

to whether the claim is directed merely to a method that is not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-36 are rejected under 35 U.S.C. 102(a) as being anticipated by “Security Analysis & Design” by Uttara Nerurkar, hereinafter referred to as Nerurkar.

As per **claim 1**, Nerurkar discloses in a computer system, a method for providing application security threat-modeling, the method comprising providing class definitions for a plurality of model (software and hardware) components (peels) to represent respective elements of an application (pg.50 col.3 par.4), each model component specifying a set of security threats categories potentially applicable to the component (security concerns) (pg.50 col.2 par.2); responsive to user input, interconnecting at least a subset of the model components to form a logical model (“onion diagram”) of the application (pg.52 col.1 par.1); and automatically analyzing the at least a subset of

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model components and respective interconnections to identify a set of potential security threats corresponding to the at least a subset, the potential security threats being associated with one or more of the security threat categories (pg.52 col.1 par.3; pg.54 col.1 par.3).

As per **claim 2**, Nerurkar discloses the method of claim 1, wherein the model components comprise a module, a port, a store, or a wire (network cabling) (pg.50 col.3 par.4).

As per **claim 3**, Nerurkar discloses the method of claim 1, wherein the security threats categories comprise at least one subset of authentication (IA), authorization (AZ), auditing (OO), privacy, integrity (OO), availability, and non-repudiation (pg.56 col.1 par.3)

As per **claim 4**, Nerurkar discloses the method of claim 1, wherein providing the class definitions further comprises determining the security threat categories based on functionality of the component with respect to the application (use of objects in the zone) (pg.50 col.2 par.2).

As per **claim 5**, Nerurkar discloses the method of claim 1, wherein analyzing further comprises responsive to selection of a particular component of the model components displaying each other component of the at least a subset that comprise at least a subset of similar potential security threat categories as the particular component (partition based on the similarity and nature of security concerns of the components) (pg.52 col.1 par3).

As per **claim 6**, Nerurkar discloses the method of claim 1, wherein analyzing further comprises responsive to selection of a particular component of the at least a subset, automatically displaying each other component of the at least a subset that comprises at least a subset of similar addressed security threats as the particular component (pg.56 col.2 par.4).

As per **claim 7**, Nerurkar discloses the method of claim 1, wherein analyzing further comprises providing for the selection of a particular threat associated with the security threat categories to indicate that the particular threat requires a threat mitigating implementation in a particular model component of the at least a subset (pg.50 col.3 par.1; pg.56 col.2 par.2).

As per **claim 8**, Nerurkar discloses the method of claim 7, wherein providing for the selection of the particular threat further comprises identifying a priority of the threat mitigating implementation (decompose into sets consisting of objects requiring similar levels of security) (pg.54 col.1 par.3).

As per **claim 9**, Nerurkar discloses the method of claim 7, wherein providing for the selection of the particular threat further comprises identifying a desired level of strength of (control) technology with which to mitigate the particular threat (pg.56 col.2 par.2).

As per **claim 10**, Neruarkar discloses the method of claim 7, wherein providing for selection of the particular threat further comprises presenting information associated with a particular technology (design and choose countermeasures based on coverage

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and costs) with which to mitigate the one or more potential threats in a physical implementation of the application (pg.50 col.3 par.1).

Claims **11-20** are directed towards a software implementation of the method of claims 1-10 and are rejected by a similar rationale.

Claims **21-30** are directed towards a computer system implementing the method of claims 1-10 and are rejected by a similar rationale.

Claim **31-33** are directed to a user interface comprising means for the implementation of the method of claims 1-3 and, are rejected by a similar rationale.

Claim **34-36** are directed to a user interface comprising means for the implementation of the method of claims 8-10 and are rejected by a similar rationale.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara Teslovich whose telephone number is (571) 272-4241. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


April 1, 2006
T. Teslovich


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER